

Cable/DSL Broadband Router

Built-in 4-Port 10/100Mbps Switch

USER GUIDE

SMC7004VBR

COMPLIANCES

FCC - Class B

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

EC Conformance Declaration - Class B

SMC contact for these products in Europe is:

SMC Networks Europe,
Edificio Conata II,
Calle Fructuós Gelabert 6-8, 2o, 4a,
08970 - Sant Joan Despí,

Barcelona, Spain.

This information technology equipment complies with the requirements of the Council Directive 89/336/EEC on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility and 73/23/EEC for electrical equipment used within certain voltage limits and the Amendment Directive 93/68/EEC. For the evaluation of the compliance with these Directives, the following standards were applied:

RFI Emission:

- Limit class B according to EN 55022:1998
- Limit class A for harmonic current emission according to EN 61000-3-2/1995
- Limitation of voltage fluctuation and flicker in low-voltage supply system according to EN 61000-3-3/1995

Immunity:

- Product family standard according to EN 55024:1998
- Electrostatic Discharge according to EN 61000-4-2:1995 (Contact Discharge: ± 4 kV, Air Discharge: ± 8 kV)
- Radio-frequency electromagnetic field according to EN 61000-4-3: 1996 (80 - 1000MHz with 1kHz AM 80% Modulation: 3V/m)

Safety Compliance

Underwriters Laboratories Compliance Statement

Important! Before making connections, make sure you have the correct cord set. Check it (read the label on the cable) against the following:

The unit automatically matches the connected input voltage. Therefore, no additional adjustments are necessary when connecting it to any input voltage within the range marked on the rear panel.

Wichtige Sicherheitshinweise (Germany)

1. Bitte lesen Sie diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie keine Flüssigoder
4. Aerosolreiniger. Am besten eignet sich ein angefeuchtetes Tuch zur Reinigung.
5. Die Netzanschlusßsteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
6. Das Gerät ist vor Feuchtigkeit zu schützen.
7. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Beschädigungen hervorrufen.
8. Die Belüftungsöffnungen dienen der Luftzirkulation, die das Gerät vor Überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
9. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
10. Verlegen Sie die Netzanschlusßleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
11. Alle Hinweise und Warnungen, die sich am Gerät befinden, sind zu beachten.
12. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
13. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das

Operating Voltage Cord Set Specifications

- 120 Volts UL Listed/CSA Certified Cord Set
- Minimum 18 AWG
- Type SVT or SJT three conductor cord
- Maximum length of 15 feet
- Parallel blade, grounding type attachment plug rated 15A, 125V
- 240 Volts (Europe only) Cord Set with H05VV-F cord having three conductors with minimum diameter of 0.75 mm²
- IEC-320 receptacle
- Male plug rated 10A, 250V

COMPLIANCES

Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.

1. Öffnen sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
2. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
 - a. Netzkabel oder Netzstecker sind beschädigt.
 - b. Flüssigkeit ist in das Gerät eingedrungen.
 - c. Das Gerät war Feuchtigkeit ausgesetzt.
 - d. Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
 - e. Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
 - f. Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
3. Stellen Sie sicher, daß die Stromversorgung dieses Gerätes nach der EN 60950 geprüft ist. Ausgangswerte der Stromversorgung sollten die Werte von AC 7,5-8V, 50-60Hz nicht über oder unterschreiten sowie den minimalen Strom von 1A nicht unterschreiten.. Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70dB(A) oder weniger.

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CHAPTER 1 | Introduction

Congratulations on your purchase of a Barricade™ Cable/DSL Broadband Router (SMC7004VBR). SMC is proud to provide you with a powerful yet simple communication device for connecting your local area network (LAN) to the Internet.

1.0 | Features and Benefits

- **EZ 3-Click Installation Wizard** - A new and improved way to install your Barricade. In 3 simple clicks, you will be connected to the Internet.
- Internet connection to DSL or cable modem via a 10/100 Mbps WAN port
- Local network connection via 10/100 Mbps Ethernet switch ports
- DHCP for dynamic IP configuration, and DNS for domain name mapping
- Firewall with Stateful Packet Inspection, client privileges, hacker prevention, DoS, and NAT
- NAT also enables multi-user access with a single-user account, and virtual server functionality (providing protected access to Internet services such as web, mail, FTP, and Telnet)
- Virtual Private Network support using PPTP, L2TP, or IPSec pass-through
- User-definable application sensing tunnel supports applications requiring multiple connections
- Parental controls allows the user to block access to certain web sites
- Email alerts when the users network is being compromised
- Easy setup through a web browser on any operating system that supports TCP/IP
- Compatible with all popular Internet applications

1.1 | Package Contents

Before installing the Barricade™ Cable/DSL Broadband Router, verify that you have the items listed under "Package Contents." Also be sure that you have the necessary cabling. If any of the items are missing or damaged, contact your local SMC distributor.

- Barricade Broadband Router
- Power adapter
- One CAT-5 Ethernet cable
- Four rubber feet
- CD with User Guide and EZ 3-Click Installation Wizard
- Quick Installation Guide

If possible, retain the carton and original packing materials in case there is a need to return the product.

1.2 | Minimum Requirements

- Cable or DSL Modem with Ethernet connection and Internet access from your local telephone company or Internet Service Provider (ISP) using a DSL modem or cable modem.
- A computer equipped with a 10 Mbps, 100 Mbps, or 10/100 Mbps Fast Ethernet card, or USB-to-Ethernet converter.
- Network adapter with Ethernet (UTP CAT 5) cabling and TCP/IP protocol installed per PC
- Internet Explorer 4.0 (or Higher) or Netscape Navigator 4.7 (or Higher) for Web-based configuration of the Barricade

CHAPTER 2 | Getting to Know the Barricade

The SMC7004VBR Barricade Cable/DSL Broadband Router is the perfect solution for the home/office environment. This full-featured router offers:

- 4 - 10/100 Mbps Auto-Sensing LAN ports with Auto-MDI MDIX feature
- 1 - 10/100 Mbps WAN port with Auto-MDI MDIX feature
- Comprehensive LEDs for network status and troubleshooting
- Reset Button



2.1 | LED Indicators

The Barricade includes LED indicators on the front panel that simplify installation and network troubleshooting.

LED	ON	OFF	FLASHING
POWER	Receiving power	Not receiving power	N/A
WAN	Good WAN connection detected	No WAN connection detected	Transmitting or receiving traffic
LINK/ACT	Good LAN connection detected	No LAN connection detected	Transmitting or receiving traffic
10/100 Mbps	LAN port operating at 100 Mbps	LAN port operating at 10 Mbps	N/A

Resetting the Barricade

The Reset button is located on the rear panel of the Barricade Broadband Router. This Reset button works 2 different ways depending on how long you hold the button down. Use a paper clip or a pencil tip to push the Reset button.

Reset

If the Router is having problems connecting to the Internet, press and hold the Reset button for 1 second to reset the router. Resetting the router keeps all of the Router's settings.

Restore Factory Defaults

If resetting the router does not resolve your issue, then you can follow these steps:

1. Power off the Barricade
2. Press the reset button and hold.
3. Power on the Barricade
4. Keep the button pressed about 5 seconds
5. Release the button
6. Watch the Power LED, it will flash 8 times.

CHAPTER 3 | Getting Connected

The SMC7004VBR Barricade Cable/DSL Broadband router is connected between the Cable/DSL Broadband Modem and your computers. If you have more than one computer to connect, simply plug the other computers into the LAN ports on the back of the router.



3.1 | Basic Installation Procedure

1. **Connect the LAN**
Run an Ethernet cable from one of the LAN ports on the back of the Barricade to your computer's network adapter.
2. **Connect the WAN**
Connect an Ethernet cable from your cable or DSL modem to the Barricade's WAN port on the back on the router.
3. **Power on**
Connect the power cable to the Barricade.

Once you have completed connecting all of the hardware, simply insert the Barricade CD-ROM and the **EZ 3-Click Installation Wizard** will automatically connect you to the Internet.

Should we go into detail how 3-click wizard works? With Screen shots??

For manual configuration of the PCs, see Chapter 4.

For advanced configuration of the Barricade Broadband Router, see Chapter 5.

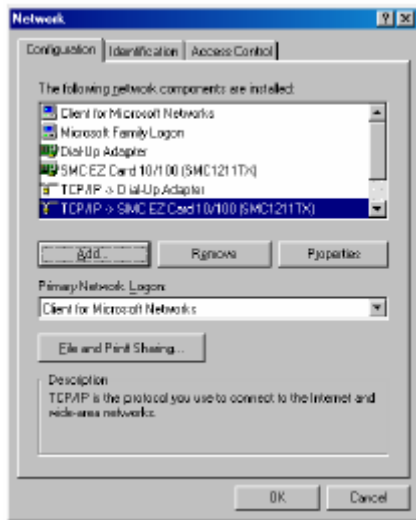
CHAPTER 4 | Configuring your Computer

The information outlined in this chapter will guide you through the configuration for the following Operating Systems:

- Windows 95/98
- Windows Me
- Windows 2000
- Windows XP
- Apple Macintosh

4.1 | Configuring Windows 95/98/Me

1. Access your Network settings by clicking [Start], choose [Settings], and then select [Control Panel].
2. In the Control Panel, locate and double-click the [Network] icon.



3. Highlight the TCP/IP line that has been assigned to your network card on the [Configuration] tab of the [Network] properties window.
4. Next, click the [Properties] button to view that adapter's TCP/IP settings.



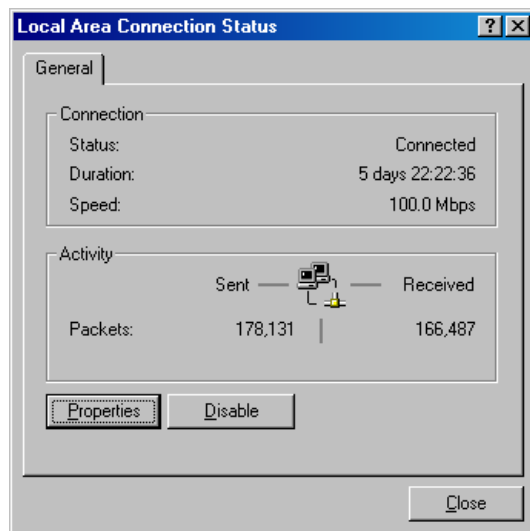
5. From the TCP/IP Properties dialog box, click the [Obtain an IP address automatically] option.
6. Next click on the [Gateway] tab and verify the Gateway field is blank. If there are IP addresses listed in the Gateway section, highlight each one and click [Remove] until the section is empty.
7. Click the [OK] button to close the TCP/IP Properties window.
8. On the Network Properties Window, click the [OK] button to save these new changes.

NOTE: Windows may ask you for the original Windows installation disk or additional files. Check for the files at c:\windows\options\cabs, or insert your Windows CD-ROM into your CD-ROM drive and check the correct file location, for example, D:\win98, D:\win9x. (assume "D" is your CD-ROM drive).

9. Windows may prompt you to restart the PC. If so, click the [Yes] button. If Windows does not prompt you to restart your computer, do so anyways to ensure your settings.

4.2 | Configuring Windows 2000

1. Access your Network settings by clicking [Start], choose [Settings], and then select [Control Panel]
2. In the Control Panel, locate and double-click the [Network and Dial-up Connections] icon
3. Locate and double-click the [Local Area Connection] icon for the Ethernet adapter that is connected to the Barricade. When the Status dialog box window opens, click the [Properties] button.

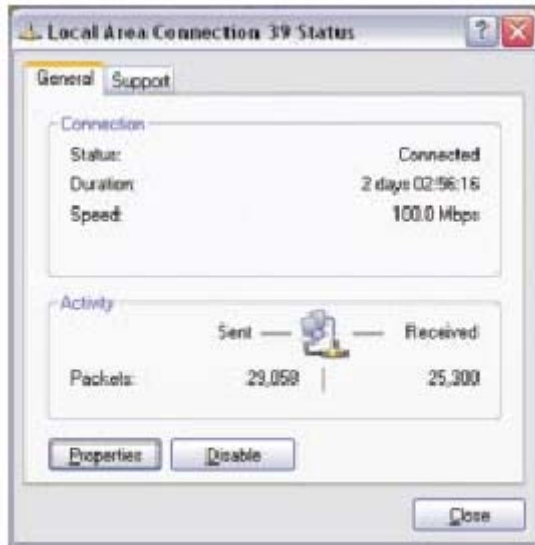


4. On the [Local Area Connection] Properties box, verify the box next to Internet Protocol (TCP/IP) is checked. Then highlight the Internet Protocol (TCP/IP), and click the Properties button.
5. Select Obtain an IP address automatically to configure your computer for DHCP. Click the [OK] button to save this change and close the Properties window.
6. Click the [OK] button again to save these new changes.
7. Reboot your PC.

4.3 | Configuring Windows XP

The following instructions assume you are running Windows XP with the default interface. If you are using the Classic interface (where the icons and menus look like previous Windows versions), please follow the instructions for Windows 2000 outlined above.

1. Access your Network settings by clicking [Start], choose [Control Panel], select [Network and Internet Connections] and then click on the [Network Connections] icon.
2. Locate and double-click the Local Area Connection icon for the Ethernet adapter that is connected to the Barricade Router. Next, click the [Properties] button.



3. On the [Local Area Connection] Properties box, verify the box next to Internet Protocol (TCP/IP) is checked. Then highlight the Internet Protocol (TCP/IP), and click the Properties button.
4. Select Obtain an IP address automatically to configure your computer for DHCP. Click the [OK] button to save this change and close the Properties window.
5. Click the [OK] button again to save these new changes.
6. Reboot your PC.

4.4 | Configuring a Macintosh Computer

You may find that the instructions here do not exactly match your screen. This is because these steps and screenshots were created using Mac OS 8.5. Mac OS 7.x and above are all very similar, but may not be identical to Mac OS 8.5.

1. Pull down the Apple Menu. Click [Control Panel] and select TCP/IP.
2. In the TCP/IP dialog box, make sure that [Ethernet] is selected in the [Connect Via:] field.

If [Using DHCP Server] is already selected in the [Configure] field, your computer is already configured for DHCP. Close the TCP/IP dialog box, and skip to Step 2 Disable HTTP Proxy (bottom of this page).

3. All the information that you need to record is on the [TCP/IP] dialog box. Use the space below to record the information.
4. Select [Using DHCP Server] in the [Configure] field and close the window.
5. Another box will appear asking whether you want to save your TCP/IP settings. Click [Save].

CHAPTER 5 | Configuring the Barricade

After you have configured TCP/IP on a client computer, use a web browser to configure the Barricade™ Broadband Router. The Barricade can be configured by any Java-supported browser including Internet Explorer 4.0 or above, or Netscape Navigator 4.7 or above. Using the web management interface, you may configure the Barricade and view statistics to monitor network activity.

NOTE: Before you attempt to configure your router, if you have access to the Internet please visit www.smc.com and download the latest firmware update.

Before you attempt to log into the Barricade's Web-based Administration, please verify the following:

1. Your browser is configured properly. (see below)
2. Disable any firewall or security software that may be running.
3. Confirm that you have a good "link" LED where your computer is plugged into the Barricade. If you don't have a "link" light, try another cable until you get a good link.

5.1 | Browser Configuration

Confirm your browser is configured for a direct connection to the Internet using the Ethernet cable that is installed in the computer. This is configured through the options/preference section of your browser.

5.2 | Disable Proxy Connection

You will also need to verify that the "HTTP Proxy" feature of your web browser is disabled. This is so that your web browser will be able to view the Barricade configuration pages. The following steps are for Internet Explorer and for Netscape. Determine which browser you use and follow the appropriate steps.

Internet Explorer (5 or above)

1. Open Internet Explorer. Click [Tools], and then select [Internet Options].
2. In the [Internet Options] window, click the [Connections] tab.
3. Click the [LAN Settings] button.
4. Clear all the check boxes and click [OK] to save these LAN settings changes.
5. Click [OK] again to close the [Internet Options] window.

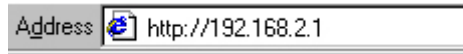
Netscape (4 or above)

1. Open Netscape. Click [Edit], and then select [Preferences].
2. In the [Preferences] window, under [Category], double-click [Advanced], then select the [Proxies] option.
3. Check [Direct connection to the Internet].
4. Click the [OK] button to save the changes.

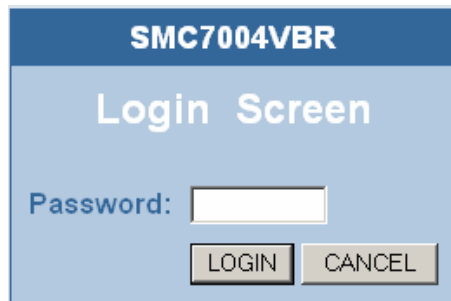
5.3 | Accessing the Barricade Management

To access the Barricade's web-based management screens, follow the steps below:

1. Launch your web-browser.
2. **NOTE:** Your computer does not have to be ONLINE to configure the Barricade Router.
In the Address Bar, type: <http://192.168.2.1>



3. When the Barricade's Login screen appears, enter the default password, and click the [Login] button to access the router.



NOTE: The Barricade default password is "smcadmin". The password is case sensitive.

4. Once you have logged into the Barricade web-based admin screens, you have 2 options which are outlined in Chapter 6 | Navigating the Web-based Administration

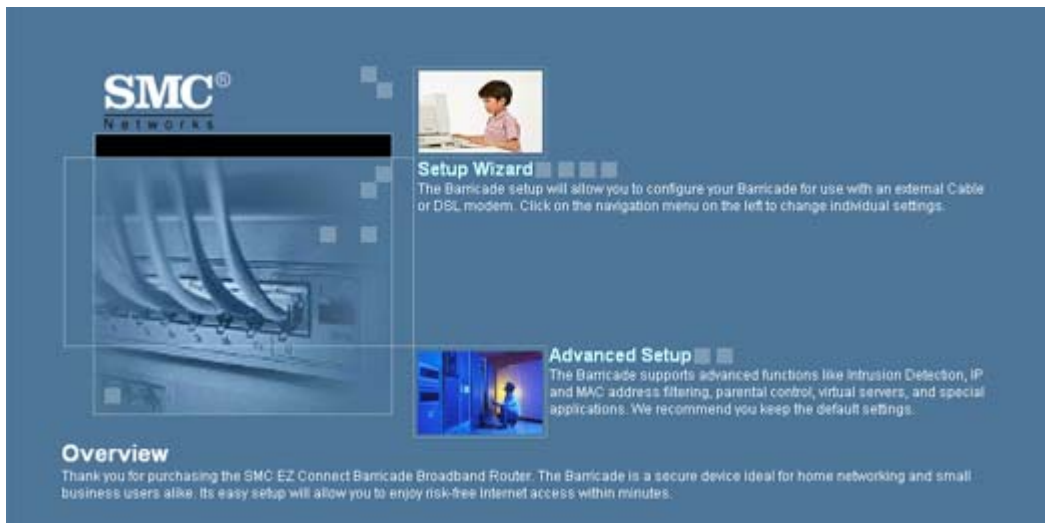
CHAPTER 6 | Navigating the Web-based Administration

The Barricade's management interface features a Setup Wizard and an Advanced Setup section. Use the Setup Wizard if you want to quickly setup the Barricade for use with a cable modem or DSL modem. Advanced setup supports more advanced functions like hacker attack detection, IP and MAC address filtering, intrusion detection, virtual server setup, virtual DMZ hosts, as well as other advanced functions.

6.1 | Making Configuration Changes

Configurable parameters have a dialog box or a drop-down list. Once a configuration change has been made on a page, be sure to click the "Apply" or "Next" button at the bottom of the page to enable the new setting.

Note: To ensure proper screen refresh after a command entry, be sure that Internet Explorer 5.0 is configured as follows: Under the menu "Tools/Internet Options/General/Temporary Internet Files/Settings," the setting for "Check for newer versions of stored pages" should be "Every visit to the page."



6.1 | Setup Wizard

Below is an outline of each option available from the Setup Wizard section. This wizard takes 3 steps to complete an ISP configuration.

6.1.1 | Step One: Time Zone

The first step is to configure the Time Zone you are located in. This setting is used for accurate timing of client filtering and log events.



6.1.2 | Step Two: Broadband Type

Select the type of broadband connection you have.



- Cable Modem**
 Your ISP may have given you a host name. If so, enter it into this field.
- Fixed-IP xDSL**
 Some xDSL Internet Service Providers may assign a fixed (static) IP address for your gateway. If you have been provided with this information, choose this option and enter the assigned IP address, subnet mask, gateway IP, and DNS IP addresses for the Barricade.

- **PPPoE**

Enter the PPPoE user name and password assigned by your Service Provider. The Service Name is normally optional, but may be required by some service providers. Leave the Maximum Transmission Unit (MTU) on the default value (1492) unless you have a particular reason to change it. Enter a Maximum Idle Time (in minutes) to define a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is inactive for longer than the Maximum Idle Time, it will be dropped. Enable the Auto-reconnect option to automatically re-establish the connection as soon as you attempt to access the Internet again.

- **PPTP**

Point-to-Point Tunneling Protocol is a common connection method used for xDSL connections in Europe.

- **BigPond®**

The BigPond Internet service is used in Australia.

6.1.2 | Step Three: Finish Configuration

Once you have configured your type of ISP connection, simply click the [Finish] button and the Barricade will automatically configure your Internet connection.

6.2 | Advanced Setup

Below is an outline of the Advanced Setup section. This section is used to manually configure your ISP connection and also define the advanced system parameters, manage and control the Barricade and its ports, or monitor network conditions.

6.2.1 | System

This section is used to configure the local time zone, password for administrator access, and the IP address of a PC that will be allowed to manage the Barricade remotely.

- **Time Zone**

Use this option to configure the time zone for the Barricade. This information is used for log entries and client access control.

There are 3 options to configure the Router's internal clock:

- **Using preset or custom NTP servers**
- **Using your computer system's clock**
- **Manually configure the Time and Date**

The screenshot shows the 'Advanced Setup' page for an SMC router, specifically the 'Time Zone' configuration section. The left sidebar lists various system settings like WAN, LAN, NAT, Firewall, DDNS, UPnP, Tools, and Status. The main content area is titled 'Time Zone' and includes instructions on how to configure the system time. It offers three methods: using online NTP servers, using the PC's date and time, or setting the date and time manually. The 'Set Date and Time by online Time Servers (NTP)' option is selected, showing a dropdown for 'Time Zone' set to '(GMT-08:00)Pacific Time (US & Canada):Tijuana', a dropdown for 'Pre-set Servers' set to 'time.nist.gov', and a 'Custom Server' field. The 'Set Date and Time using PC's Date and Time' option shows the 'Computer Time/Date' as 'Thursday, June 19, 2003 11:18:06 PM'. The 'Set Date and Time manually' option shows date fields for Year (2003), Month (Jun), and Day (19), and time fields for Hour (22), Minute (36), and Second (44). At the bottom right, there are buttons for 'HELP', 'APPLY', and 'CANCEL'.

- **Password Settings**

Use this menu to restrict access based on a password. By default, the password is "smcadmin".

NOTE: Passwords can contain up to 9 alphanumeric characters and are case sensitive.

The screenshot shows the SMC Networks Advanced Setup web interface. The left sidebar contains a navigation menu with the following items: System (expanded), Time Zone, Password Settings, Remote Management, WAN, LAN, NAT, Firewall, DDNS, UPnP, Tools, and Status. The main content area is titled "Password Settings" and includes the following text: "Set a password to secure access to the Barricade Web Management. You can also configure the amount of time that you will stay logged into the router using the idle time settings." Below this text are two sections: "Password Options" and "Idle Time Out Settings".

Password Options	
Current Password :	<input type="text"/>
New Password :	<input type="text"/>
Confirm New Password :	<input type="text"/>

Idle Time Out Settings	
Idle Time Out :	<input type="text" value="0"/> Mins (Idle Time =0 : NO Time Out)

At the bottom right of the main content area, there are three circular buttons: HELP, APPLY, and CANCEL.

- **Remote Management**

This feature allows a remote PC to configure, manage, and monitor the Barricade using a standard web browser.

1. Check "Enable"
2. Set the "Allow Access" policy to one of the 2 options:
 - **Any IP Address** – you can remotely managed the Barricade from any IP address on the WAN side.
 - **Single IP** – you can only remotely managed the Barricade from this IP address on the WAN side.
 - **IP Range** – you can remotely managed the Barricade from any IP address in this range.

3. Set the Remote Management Port to the port through which you want to remotely access the Barricade.

NOTE: Do not set this for a port that is already in use. For example, if you are running a web server on port 80, you can't set the remote admin port to 80.

The screenshot shows the SMC Networks Advanced Setup web interface. The left sidebar contains a navigation menu with the following items: System (expanded), Time Zone, Password Settings, Remote Management (highlighted), WAN, LAN, NAT, Firewall, DDNS, UPnP, Tools, and Status. The main content area is titled "Remote Management" and includes a descriptive text: "Set the remote management of the Wireless Barricade. If you want to manage the Wireless Barricade from a remote location (outside of the local network), you must also specify the IP address of the remote PC." Below this text is a configuration form with the following fields:

Remote Management :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Allow Access to :	<input checked="" type="radio"/> Any IP Address
	<input type="radio"/> Single IP : <input type="text"/>
	<input type="radio"/> IP Range : <input type="text"/> ~ <input type="text"/>
Remote Management Port :	<input type="text" value="88"/>

At the bottom right of the form are three buttons: HELP, APPLY, and CANCEL.

6.2.2 | WAN

Specify the WAN connection type provided by your Internet Service Provider, then click “More Configuration” to enter detailed configuration parameters for the selected connection type.

- **Dynamic IP**

The Host Name is optional, but it may be required by some ISPs. The default MAC address is set to the WAN’s physical interface on the Barricade. Use this address when registering for Internet service, and do not change it unless required by your ISP. If your ISP used the MAC address of an Ethernet card as an identifier when first setting up your broadband account, connect only the PC with the registered MAC address to the Barricade and click the “Clone MAC Address” button. This will replace the current Barricade MAC address with the already registered Ethernet card MAC address.

If you are unsure of which PC did the broadband technician originally set up, call your ISP and request they register a new MAC address for your account. Register using the Barricade’s MAC address.

The screenshot shows the SMC Networks Advanced Setup web interface. The left sidebar contains a navigation menu with the following items: System, WAN (selected), Dynamic IP, PPPoE, PPTP, Static IP, BigPond®, DNS, LAN, NAT, Firewall, DDNS, UPnP, Tools, and Status. The main content area is titled "Dynamic IP" and contains the following text:

The Host name is optional, but may be required by some Service Provider's. The default MAC address is set to the WAN's physical interface on the Barricade.

If required by your Service Provider, you use the "Clone MAC Address" button to copy the MAC address of the Network Interface Card installed in your PC to replace the WAN MAC address.

If necessary, you can use the "Release" and "Renew" buttons on the Status page to release and renew the WAN IP address.

Below the text, there is a form with the following fields and buttons:

Host Name	<input type="text"/>
MAC Address	<input type="text" value="00-50-18-1A-11-1B"/>
<input type="button" value="Clone MAC Address"/>	

At the bottom right of the form area, there are three circular buttons: HELP, APPLY, and CANCEL.

- **PPPoE**

Enter the PPPoE user name and password assigned by your Service Provider. The Service Name is normally optional, but may be required by some service providers. The MTU (Maximum Transmission Unit) governs the maximum size of the data packets. Leave this on the default value (1492) unless you have a particular reason to change it.

Enter a Maximum Idle Time (in minutes) to define a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is inactive for longer than the Maximum Idle Time, it will be dropped. Enable the Auto-reconnect option to automatically re-establish the connection when an application attempts to access the Internet again.

The screenshot shows the 'Advanced Setup' window for SMC Networks. The left sidebar lists various system settings, with 'WAN' expanded and 'PPPoE' selected. The main content area is titled 'PPPoE' and contains a descriptive paragraph about the protocol. Below the text is a form with the following fields: 'User Name', 'Password', 'Please retype your password', 'Service Name', 'MTU' (set to 1492), 'Maximum Idle Time (0-60)' (set to 10), and an 'Auto-reconnect' checkbox which is checked. At the bottom right are 'HELP', 'APPLY', and 'CANCEL' buttons.

- **PPTP**

Point-to-Point Tunneling Protocol (PPTP) allows the secure remote access over the Internet by simply dialing in a local point provided by an ISP. Using the above screen allows client PCs to establish a normal PPTP session and provides hassle-free configuration of the PPTP client on each client PC.

The screenshot shows the 'Advanced Setup' window for SMC Networks, with 'PPTP' selected in the left sidebar. The main content area is titled 'PPTP' and includes a brief description of the protocol. The configuration form contains fields for: 'PPTP Account', 'PPTP Password', 'Please retype your password', 'Service IP Address' (0.0.0.0), 'My IP Address' (0.0.0.0), 'My Subnet Mask' (255.255.255.0), 'Connection ID', 'MTU' (1492), 'Maximum Idle Time (0-60)' (10), and an 'Auto-reconnect' checkbox (checked). 'HELP', 'APPLY', and 'CANCEL' buttons are at the bottom right.

- **Static IP Address**

If your Internet Service Provider has assigned a fixed IP address to you, enter the assigned address and subnet mask for the Barricade, and then enter the gateway address of your ISP. You may need a fixed address if you want to provide Internet services, such as a web server, or FTP server.

The screenshot shows the SMC Networks Advanced Setup interface. The left sidebar contains a tree view with categories: System, WAN, LAN, NAT, Firewall, DDNS, UPnP, Tools, and Status. Under the WAN category, the following options are listed: Dynamic IP, PPPoE, PPTP, Static IP (highlighted), BigPond®, and DNS. The main content area is titled 'Static IP' and includes the instruction: 'If your Service Provider has assigned a fixed IP address, enter all of the information below.' Below this instruction is a table with five rows for inputting network information:

IP Address :	<input type="text" value="0.0.0.0"/>
Subnet Mask :	<input type="text" value="255.255.255.0"/>
Gateway Address :	<input type="text" value="0.0.0.0"/>
Primary DNS Server :	<input type="text" value="0.0.0.0"/>
Secondary DNS Server :	<input type="text" value="0.0.0.0"/>

At the bottom right of the main content area, there are three circular buttons: HELP, APPLY, and CANCEL.

- **BigPond®**

Use this section to configure the built-in client.

The screenshot shows the SMC Networks Advanced Setup interface for the BigPond configuration. The left sidebar is identical to the previous screenshot, with 'BigPond®' highlighted under the WAN category. The main content area is titled 'BigPond' and includes the instruction: 'In this section you can configure the built-in client for the BigPond Internet service available in Australia.' Below this instruction is a table with four rows for inputting BigPond client information:

User Name :	<input type="text"/>
Password :	<input type="text"/>
Please retype your password :	<input type="text"/>
Authentication Service Name :	<input type="text"/> (optional)

At the bottom right of the main content area, there are three circular buttons: HELP, APPLY, and CANCEL.

- **DNS**

Domain Name Servers map numerical IP addresses to the equivalent domain name (e.g., www.smc.com). Your ISP should provide the IP address of one or more domain name servers. Enter those addresses on this screen.

The screenshot shows the SMC Networks Advanced Setup interface. The left sidebar contains a navigation menu with options: System, WAN, Dynamic IP, PPPoE, PPTP, Static IP, BigPond®, DNS (highlighted), LAN, NAT, Firewall, DDNS, UPnP, Tools, and Status. The main content area is titled 'DNS' and includes a descriptive paragraph about DNS servers. Below the text are two input fields: 'Primary DNS Server' and 'Secondary DNS Server', both with '0.0.0.0' entered. At the bottom right, there are three buttons: HELP, APPLY, and CANCEL.

6.2.3 | LAN

From this section, you can configure the TCP/IP configuration for the Barricade LAN interface and DHCP clients.

- **LAN IP**

Use the LAN menu to configure the LAN IP address for the Barricade and to enable the DHCP server for dynamic client addresses allocation. Set a period for the lease time if required. For home networks, this may be set to “Forever”, which means there is no time limit on the IP address lease.

- **IP Address Pool**

A dynamic IP start address may be specified by the user, e.g. 192.168.2.100 (default value). In this example, the IP addresses run from 192.168.2.100 to 192.168.2.199 which will be part of the dynamic IP address pool. IP addresses from 192.168.2.2 to 192.168.2.99, and 192.168.2.200 to 192.168.2.254 will be available as static IP addresses.

NOTE: Do not include the address of the Barricade in the DHCP client address pool.

SMC Networks Advanced Setup

System
WAN
LAN
NAT
Firewall
DDNS
UPnP
Tools
Status

LAN Settings

You can enable DHCP to dynamically allocate IP addresses to your client PCs, or configure filtering functions based on specific clients or protocols. The Wireless Barricade must have an IP address for the local network.

LAN IP Settings

IP Address: 192.168.2.1
Subnet Mask: 255.255.255.0
DHCP Server: ☒ Enable ☐ Disable

DHCP Server Settings

Lease Time: One Week
Start IP Address pool: 192.168.2.100
End IP Address pool: 192.168.2.199

HELP APPLY CANCEL

6.2.4 | NAT

From this section, you can configure the Virtual Server and Special Application features that provide control over the port openings in the router's firewall. This section can be used to support several Internet based applications such as VPN connections.

- Virtual Server**

You can configure the Barricade as a virtual server. Remote users accessing services such as the Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses. To provide the most flexibility, the Barricade can support either a single port (80) or a range of ports (80-100). The traffic type can also be defined as TCP, UDP, or both (UDP and TCP).

Some of the more common ports include: HTTP: 80, FTP: 21, Telnet: 23 and POP3: 110.

SMC Networks Advanced Setup

System
WAN
LAN
NAT
Virtual Server
Special Applications
Firewall
DDNS
UPnP
Tools
Status

Virtual Server

You can configure the Barricade as a virtual server so that remote users accessing services such as the Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses. In other words, depending on the requested service (TCP/UDP port number), the Wireless Barricade redirects the external service request to the appropriate server (located at another internal IP address).

Web known services: --select one-- Copy To

ID	IP Address	Ports	Service Type	Enable
1	192.168.2.1		TCP	<input type="checkbox"/>
2	192.168.2.1		TCP	<input type="checkbox"/>
3	192.168.2.1		TCP	<input type="checkbox"/>
4	192.168.2.1		TCP	<input type="checkbox"/>
5	192.168.2.1		TCP	<input type="checkbox"/>
6	192.168.2.1		TCP	<input type="checkbox"/>
7	192.168.2.1		TCP	<input type="checkbox"/>
8	192.168.2.1		TCP	<input type="checkbox"/>
9	192.168.2.1		TCP	<input type="checkbox"/>
10	192.168.2.1		TCP	<input type="checkbox"/>
11	192.168.2.1		TCP	<input type="checkbox"/>
12	192.168.2.1		TCP	<input type="checkbox"/>
13	192.168.2.1		TCP	<input type="checkbox"/>
14	192.168.2.1		TCP	<input type="checkbox"/>
15	192.168.2.1		TCP	<input type="checkbox"/>
16	192.168.2.1		TCP	<input type="checkbox"/>
17	192.168.2.1		TCP	<input type="checkbox"/>
18	192.168.2.1		TCP	<input type="checkbox"/>
19	192.168.2.1		TCP	<input type="checkbox"/>
20	192.168.2.1		TCP	<input type="checkbox"/>

- **Special Applications**

Some applications, such as Internet gaming, videoconferencing, Internet telephony require multiple connections. These applications cannot work with Network Address Translation (NAT) enabled. If you need to run applications that require multiple connections, use the following screen to specify the additional public ports to be opened for each application.

Specify the port or port range normally associated with an application in the “Trigger Port” field, select the protocol type as TCP or UDP, and then enter the public ports and data type associated with the trigger port to open them for inbound traffic.

The maximum range that you can use for all NAT ports is 0 to 65535.

Special Applications

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications cannot work when Network Address Translation (NAT) is enabled. If you need to run applications that require multiple connections, specify the port normally associated with an application in the “Trigger Port” field, select the protocol type as TCP or UDP, then enter the public ports associated with the trigger port to open them for inbound traffic.

Popular applications:

ID	Trigger Port's	Trigger Type	Incoming Port's	Data Type	Enable
1	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
4	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
5	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
6	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
7	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
8	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
9	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>
10	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="checkbox"/>

6.2.5 | Firewall

The firewall does not significantly affect system performance, so we advise enabling it to protect your network users. To enable the Stateful Packet Inspection (SPI) firewall, click on “Advanced” under the Firewall section and select “Enable” and click the “Apply” button.

The Barricade SPI firewall can provide the access control of connected client PCs, block common hacker attacks, including IP Spoofing, Land Attack, Ping of Death, IP with zero length, Smurf Attack, UDP Port Loopback, Snork Attack, TCP Null Scan, and TCP SYN Flooding.

- **Parental Control**

Using this option allows you to specify different privileges for the client PCs. This is an excellent tool to control a child’s access to specific content and/or general internet access for a specific time and/or date.

To setup a Parental Control Rule: Click on “Click here to configure a new Parental Control Rule” link. This will take you to the Rule Setup section.

Parental Control : ☐ Enable ☒ Disable

Create Rule : [Click here to configure a new Parental Control Rule](#)

Rule Description :	<input type="text"/>	
DHCP menu option :	<input type="radio"/> Computer Name : DHCP client list <input type="button" value="v"/> <input checked="" type="radio"/> Single IP : 192.168.2. <input type="text"/> 0 <input type="radio"/> IP Range : 192.168.2. <input type="text"/> - <input type="text"/>	
Schedule for Rule :	<input checked="" type="radio"/> Rule is Active all the time <input type="radio"/> Set Time and Date Rule is Active	

Pre-Defined Blocking Options		
Block	Block Information	Enable
..Any Internet Access	HTTP, TCP Port 80, 3128, 8000, 8080, 8081	<input type="checkbox"/>
..Specific Web Sites	Set Web Sites and Keywords you want to block	<input type="checkbox"/>
..Secure Web Sites	HTTPS, TCP Port 443	<input type="checkbox"/>
..E-mail Sending	SMTP, TCP Port 25	<input type="checkbox"/>
..E-mail Receiving	POP3, TCP Port 110	<input type="checkbox"/>
..Newsgroup Access	NNTP, TCP Port 119	<input type="checkbox"/>
..FTP Access	FTP, TCP Port 20,21	<input type="checkbox"/>

Custom Blocking Options		
Block	Port Types	Enable
Ports: <input type="text"/> - <input type="text"/>	TCP <input type="button" value="v"/> Traffic	<input type="checkbox"/>
Ports: <input type="text"/> - <input type="text"/>	TCP <input type="button" value="v"/> Traffic	<input type="checkbox"/>
Ports: <input type="text"/> - <input type="text"/>	TCP <input type="button" value="v"/> Traffic	<input type="checkbox"/>
Ports: <input type="text"/> - <input type="text"/>	TCP <input type="button" value="v"/> Traffic	<input type="checkbox"/>

Rule Description: Set a Rule Description so you know what this rule applies to. Ex. Jon's Internet Access.

DHCP Option: Apply this rule to a specific IP Address or range of IP's on your network. You can use the DHCP client list to quickly add IP addresses that were provided via DHCP connections.

Schedule Rule: Set the time and date this rule is active. You can have this rule be active all the time or configure it to only be active on set days and times.

You can pick the dates you want this rule to be active by checking the box next to the date.

For time, set the start time you want the Rule to active, and then set how long you want the rule to run.

Schedule for Rule :	<input type="radio"/> Rule is Active all the time <input checked="" type="radio"/> Set Time and Date Rule is Active	
Rule is Active on :	<input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday	
Rule Starts at :	<input type="text"/> : <input type="text"/> AM <input type="button" value="v"/>	
Rule is Active for :	<input type="text"/> hours <input type="text"/> minutes	

- **MAC Filtering**

The MAC Filtering feature of the Barricade allows you to control access to your network based on the MAC (Media Access Control) Address of the client machine. This ID is unique to each network adapter.

You can configure that MAC address to be allowed to access your network, or to deny access to the network.

This tool will also allow you to MAP DHCP IP Addresses to certain MAC Addresses. This tool works well in conjunction with the Parental Control rules to provide maximum control.

The screenshot shows the SMC Networks Advanced Setup interface. On the left is a navigation menu with options: System, WAN, LAN, NAT, Firewall (selected), Parental Control, MAC Filtering, Website Blocking, Advanced, DMZ, DDNS, UPnP, Tools, and Status. The main content area is titled "MAC Filtering Table". Below the title is a description: "This section helps provides MAC Filter configuration. When enabled, only MAC addresses configured will have access to your network. All other client devices will get denied access. This security feature can support up to 32 devices and applies to clients." Below this is a configuration section with "MAC Address Control" set to "Enable" (radio button selected) and "Disable" (radio button unselected). There is a "DHCP Client List" dropdown menu currently showing "-- select one --", a "Copy to" button, and an "ID" dropdown menu. Below these are "Previous page" and "Next page" links. The main part of the page is a table with 8 rows and 6 columns: ID, Computer Name, IP Address, MAC Address, Allow, and Deny. Each row has input fields for the first four columns and radio buttons for the last two. At the bottom right are three buttons: HELP, APPLY, and CANCEL.

ID	Computer Name	IP Address	MAC Address	Allow	Deny
1		192.168.2		<input type="radio"/>	<input type="radio"/>
2		192.168.2		<input type="radio"/>	<input type="radio"/>
3		192.168.2		<input type="radio"/>	<input type="radio"/>
4		192.168.2		<input type="radio"/>	<input type="radio"/>
5		192.168.2		<input type="radio"/>	<input type="radio"/>
6		192.168.2		<input type="radio"/>	<input type="radio"/>
7		192.168.2		<input type="radio"/>	<input type="radio"/>
8		192.168.2		<input type="radio"/>	<input type="radio"/>

- **Website Blocking**

The Website Blocking feature of the Barricade limits access to website domains (i.e. www.somesite.com) or by using keywords which will block any websites that have that keyword in the URL. This feature is an ideal way to protect your family members from questionable content on the Internet

Website Blocking

You can block access to certain Web sites from a particular PC by entering either a full URL address or just a keyword of the Web site.

To specify the PCs that you want to block these websites to, go to the "Parental Control" page and check the box for "Block-Specific Web Sites" in the "Pre-Defined Blocking Options" section.

Rule Number	URL / Keyword	Rule Number	URL / Keyword
Site 1		Site 2	
Site 3		Site 4	
Site 5		Site 6	
Site 7		Site 8	
Site 9		Site 10	
Site 11		Site 12	
Site 13		Site 14	
Site 15		Site 16	
Site 17		Site 18	
Site 19		Site 20	
Site 21		Site 22	
Site 23		Site 24	

Clear All URLs and Keywords

HELP APPLY CANCEL

- **Advanced Settings**

This section allows you to configure several advanced features for the Barricade Firewall.

Advanced Firewall Settings

Use this section to configure the advanced settings of your Barricade Firewall. You can enable/disable each option depending on your requirements. If you want to be alerted via email for hacker attacks, please configure the email alert option.

Email Alerts require you to set an SMTP (outgoing) mail server to send the email. Your username and password are also required as most ISPs are using outgoing authentication to cut down on SPAM.

FIREWALL Options

Advanced Firewall Protection: ☒ Enable ☐ Disable

Discard Ping From WAN: ☒ Enable ☐ Disable

VPN Passthrough

PPTP: ☐ Enable ☒ Disable

IPSec: ☐ Enable ☒ Disable

E-MAIL Settings

Your E-mail Address:

SMTP Server Address:

User name:

Password:

HELP APPLY CANCEL

The following features can be set on this page:

- **Advanced Firewall Protection:** Enable/Disable SPI section of firewall.

- **Discard Ping from WAN:** When this feature is enabled, any host on the WAN cannot ping this product. This helps avoid unnecessary attacks from the WAN side because your connection is invisible. It is recommended that you enable this option for security.
 - **VPN Pass-through:** Enable this option if you are using a PPTP, L2TP or IPSec VPN connection.
 - **Email Alert:** Configure this option if you want the Barricade to email when hackers attempt to attack your network to a specific email address. You will need to configure your email address, username and password, as well as a SMTP server to send the mail through.
- **DMZ (Demilitarized Zone)**
If you have a client PC that cannot run an Internet application properly from behind the firewall, then you can open the client PC up to unrestricted two-way Internet access. Enter the LAN IP address of a DMZ host and click "Enable".

NOTE: Adding a client to the DMZ (Demilitarized Zone) may expose your local network to a variety of security risks. Only use this option as a last resort.

6.2.6 | DDNS (Dynamic DNS)

The Barricade has an integrated Dynamic DNS feature that provides users on the Internet a method to tie their domain name(s) to computers or servers. DDNS allows your domain name to follow your IP address automatically by having your DNS records changed when your IP address changes.

The section also has a "Server Configuration" section that automatically opens the port options checked in the Virtual Server section. Simply enter in the IP Address of your server, such as a web server, and then click on the port option HTTP Port 80 so users can access your server from the WAN connection (Internet).

SMC® Networks Advanced Setup Home Logout

DDNS (Dynamic DNS) Settings

Dynamic DNS provides users on the Internet a method to tie their domain name(s) to computers or servers. DDNS allows your domain name to follow your IP address automatically by having your DNS records changed when your IP address changes.

Dynamic DNS: ☒ Enable ☐ Disable

Service Configuration

DDNS Service:

Domain Name:

Username / E-mail:

Password / Key:

Server Configuration

Server IP:

Server Type:

Web Server: (HTTP) Port 80 <input type="checkbox"/>	Port 8000 <input type="checkbox"/>
FTP Server: Port 20 <input type="checkbox"/>	Port 21 <input type="checkbox"/>
Email Server: (POP3) Port 110 <input type="checkbox"/>	(SMTP) Port 25 <input type="checkbox"/>

HELP APPLY CANCEL

6.2.7 | UPnP

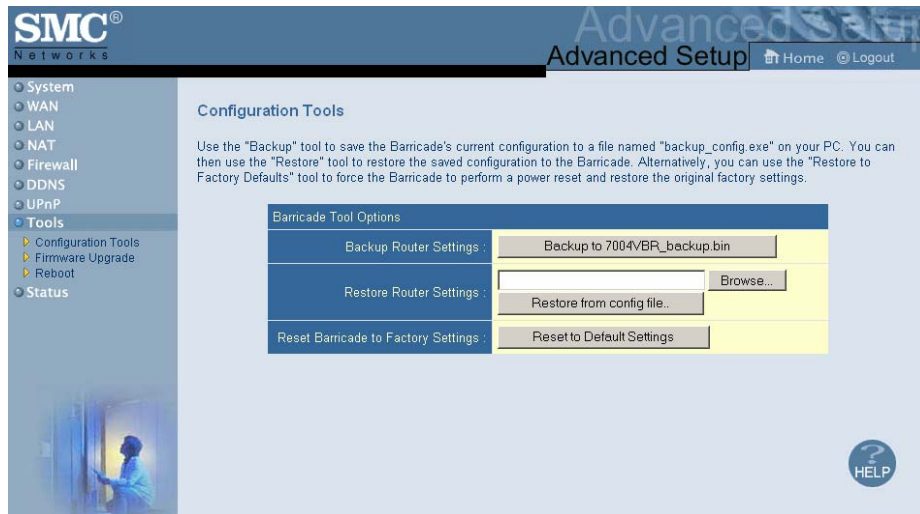
The Barricade supports UPnP (Universal Plug and Play), a networking architecture that provides compatibility amongst networking equipment. This feature allows an UPnP based operating system, like Windows XP to automatically communicate with the Barricade and open the required services when needed.

6.2.8 | Tools

Use the “Tools” menu to backup the current configuration, restore a previously saved configuration, restore factory settings, update firmware, and reset the Barricade.

- **Configuration Tools**

- **Backup**
Backup saves the Barricade’s configuration to a file.
- **Restore**
To restore settings from a saved backup configuration file.
- **Restore to factory defaults**
Restores the Barricade settings back to the factory default settings.



- **Firmware Upgrade**

This tool permits easy downloading of the latest Firmware. Download the upgrade file from the SMC website (www.smc.com) and save it to your hard drive. Browse for the file and then click “Apply”. Check the Status page Information section to confirm that the upgrade process was successful.

- **Reboot**

Click “Apply” to reboot the Barricade. The reset will be complete when the power LED stops blinking.

Note: Some options, when enabled, will require you to reboot the router. You can use this option to perform that function.

6.2.9 | Status

The Status screen displays WAN/LAN connection status, firmware, and hardware version numbers, illegal attempts to access your network, as well as information on DHCP clients connected to your network.

The following items are included on this screen:

1. **INTERNET**
Displays WAN connection type and status.
2. **GATEWAY**
Displays system IP settings, as well as DHCP and Firewall status.

3. **INFORMATION**

Displays the number of attached clients, the firmware versions, and the physical MAC address for each media interface, as well as the hardware version and serial number.

4. **Security Log**

Displays illegal attempts to access your network.

- a. Save Click on this button to save a security log file.
- b. Clear Click on this button to delete the access log.
- c. Refresh Click on this button to refresh the screen.

5. **DHCP Client Log**

Displays information on all DHCP clients on your network.

For additional information on the 7004VBR, please visit www.smc.com.

APPENDIX A | Troubleshooting

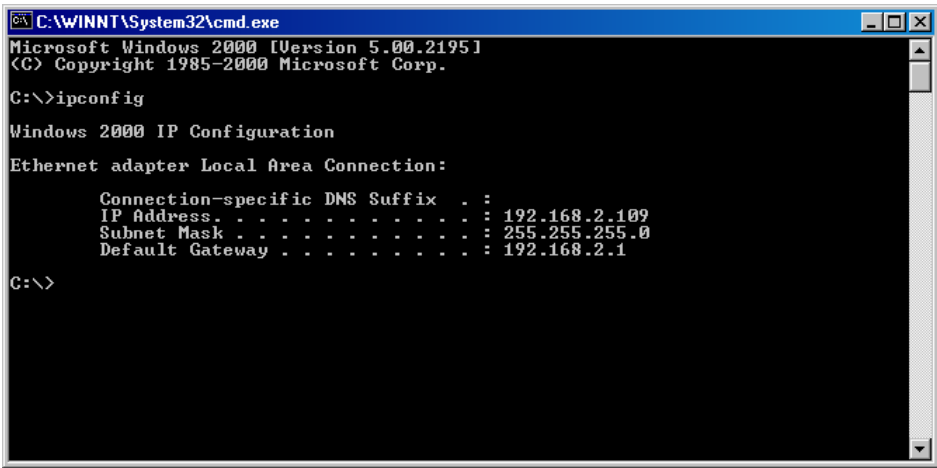
The information outlined in this section describes some useful steps for getting your computer and Barricade router online.

A.1 | Verify you are connected to the Barricade Router

If you are unable to access the Barricade's web-based administration pages, then you may not be properly connected or configured. The screen shots in this section were taken on a Windows 2000 machine, but the same steps will apply to Windows 95/98/Me/XP.

To determine your TCP/IP configuration status, please follow the steps below:

1. Click [Start] then choose [Run]
2. Type "cmd" or "command" (without the quotes) to open a DOS prompt.
3. In the DOS window, type "ipconfig" and verify the information that is displayed.
4. If your computer is setup for DHCP, then your TCP/IP configuration should be similar to the information displayed:
 - IP Address: 192.168.2.X (x is number between 100 and 199)
 - Subnet: 255.255.255.0
 - Gateway: 192.168.2.1



```

C:\WINNT\System32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ipconfig

Windows 2000 IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 192.168.2.109
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.2.1

C:\>
  
```

If you have an IP address that starts with 169.254.XXX.XXX then see section A.2.

If you have another IP address configured, see section A.3.

A.2 | I am getting an IP Address that starts with 169.254.XXX.XXX

If you are getting this IP Address, then you need to check that you are properly connected to the Barricade Router.

Confirm that you have a good link light on the Barricade's port to which this computer is connected. If not, please try another cable.

If you have a good link light, please open up a DOS window as described in section A.1 and type "ipconfig /renew" (without the quotes)

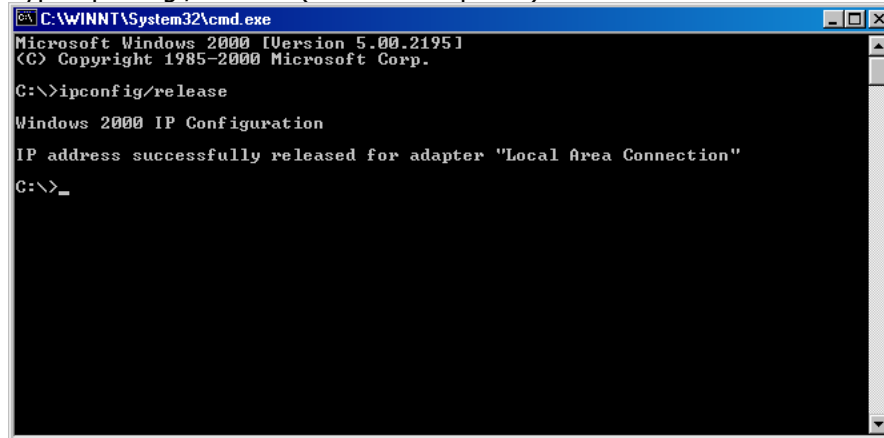
If you are still unable to get an IP Address from the Barricade, reinstall your network adapter. Please refer to your adapter manual for instructions.

A.3 | I have another IP Address displayed

If you have another IP address listed, then the PC may not be configured for a DHCP connection. Please refer to **Chapter 4 | Configure your Computer** for information.

Once you have confirmed your computer is configured for DHCP, then please follow the steps below.

1. Open a DOS window as described above.
2. Type "ipconfig /release" (without the quotes)



```

C:\WINNT\System32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ipconfig/release

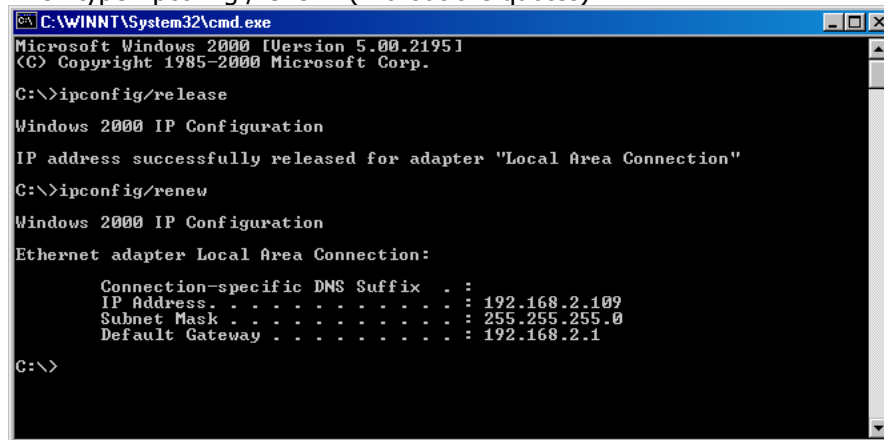
Windows 2000 IP Configuration

IP address successfully released for adapter "Local Area Connection"

C:\>_

```

3. Then type "ipconfig /renew" (without the quotes)



```

C:\WINNT\System32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ipconfig/release

Windows 2000 IP Configuration

IP address successfully released for adapter "Local Area Connection"

C:\>ipconfig/renew

Windows 2000 IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 192.168.2.109
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.2.1

C:\>

```

Once you are able to get a valid IP address from the Barricade Router, then you can now access the web-based Administration pages.

If you still are not getting an IP address from the Barricade, please reset the router as outlined in Chapter 2 and follow the steps outlined in this appendix again.

If you still cannot access the router once you have reset it, please contact SMC Technical Support.

A.4 | I have a Dynamic IP connection and I can't get online

Most cable companies use a Dynamic IP configuration to provide Internet access. If you have this type of connection, and are unable to get connected, please follow the steps outlined below:

1. Unplug the power from your Cable or DSL modem for 2 mins.
2. Confirm that your Barricade router is configured for a Dynamic IP configuration
3. Plug the power back into your Modem.
4. Wait for your Modem to connect to the network, and then click on the status page of the router to confirm that you are online.

The reason this process works is because certain broadband connections require a MAC address to gain network access. This MAC address can be changed by following the above process to re-set the approved MAC address to the MAC address of the Barricade router.

APPENDIX B | Technical Specifications

Below is an outline of the Technical Specifications for the Barricade 4-Port Cable/DSL Broadband Router (SMC7004VBR)

LAN Interface

4 - RJ-45 10/100Mbps Auto MDI/MDI-X ports

WAN Interface

10/100, 1 RJ-45 port

Management

Web management

Advanced Features

Dynamic IP Address Configuration – DHCP, DNS
 Firewall – Client privileges, hacker prevention and logging
 Virtual Private Network – PPTP, L2TP, IPSec pass-through
 Universal Plug and Play
 Dynamic DNS Service

Indicator Panel

Power
 WAN (Link, Activity)
 Link/Act (Link, Activity)
 10/100M (on is 100Mbps / off is 10Mbps)

[USE The INFOT FROM 7004VBR Datatsheet](#)

Dimensions

?

Weight

?

Input Power

?

Maximum Current

?

Power Consumption

?

Heat Dissipation

?

Internet Standards

ARP (RFC 826), IP (RFC 791), ICMP (RFC 792), UDP (RFC 768), TCP (RFC 793), Telnet (RFC 854-859), MD5 (RFC 1321), BOOTP Extension (RFC 1497), PPP LCP Extension (RFC 1570), PPPoE (RFC 2516), NAT (RFC 1631), PPP (RFC 1661), HTML (RFC 1866), HTTP (RFC 1945), CHAP (RFC 1944), DHCP (RFC 2131), PPTP (RFC 2637)

Temperature

Operating 32 to 104°F (0 to 40°C)
Storage -40 to 158°F (-40 to 70°C)

Humidity

5% to 95% (non-condensing)

Compliances

CE Mark
Emissions
FCC Class B
Industry Canada Class B
EN55022 (CISPR 22) Class B
Immunity
EN 61000-3-2/3
EN 61000-4-2/3/4/5/6/8/11
Safety
UL 1950
EN60950 (TÜV)
CSA 22.2 No. 950

TECHNICAL SUPPORT

PHONE

From U.S.A. and Canada (24 hours a day, 7 days a week)

- (800) SMC-4-YOU
- (949) 679-8000
- Fax: (949) 679-1481

From Europe (8:00 AM - 5:30 PM UK Time)

- 44 (0) 118 974 8700
- Fax: 44 (0) 118 974 8701

INTERNET

E-mail addresses:

- techsupport@smc.com
- european.techsupport@smc-europe.com

Driver updates:

- http://www.smc.com/index.cfm?action=tech_support_drivers_downloads

World Wide Web:

- <http://www.smc.com/>
- <http://www.smc-europe.com/>

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U.S.A. and Canada:	(800) SMC-4-YOU	Fax (949) 679-1481
Spain:	34-93-477-4935	Fax 34-93-477-3774
UK:	44 (0) 118 974 8700	Fax 44 (0) 118 974 8701
France:	33 (0) 41 38 32 32	Fax 33 (0) 41 38 01 58
Italy:	39 02 739 12 33	Fax 39 02 739 14 17
Benelux:	31 33 455 72 88	Fax 31 33 455 73 30
Central Europe:	49 (0) 89 92861-0	Fax 49 (0) 89 92861-230
Switzerland:	41 (0) 1 9409971	Fax 41 (0) 1 9409972
Nordic:	46 (0) 868 70700	Fax 46 (0) 887 62 62
Northern Europe:	44 (0) 118 974 8700	Fax 44 (0) 118 974 8701
Eastern Europe:	34 -93-477-4920	Fax 34 93 477 3774
Sub Saharan Africa:	27-11 314 1133	Fax 27-11 314 9133
North Africa:	34 93 477 4920	Fax 34 93 477 3774
Russia:	7 (095) 290 29 96	Fax 7 (095) 290 29 96
PRC:	86-10-6235-4958	Fax 86-10-6235-4962
Taiwan:	886-2-2659-9669	Fax 886-2-2659-9666
Asia Pacific:	(65) 238 6556	Fax (65) 238 6466
Korea:	82-2-553-0860	Fax 82-2-553-7202
Japan:	81-3-5645-5715	Fax 81-3-5645-5716
Australia:	61-2-8875-7887	Fax 61-2-8875-7777
India:	91-22-8204437	Fax 91-22-8204443

If you are looking for further contact information, please visit www.smc.com or www.smc-europe.com